

**PROSPECTUS**  
**FOR**  
**POWER TRANSMISSION PROJECT**

October, 1971

The Government of the Republic of Korea  
Seoul, Korea

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## SUMMARY OF THE PROJECT

1. Project Title : Transmission and Distribution Facilities Expansion.
2. Project Sponsor : Korea Electric Company.
3. Estimated Required Fund :

Foreign Capital : \$11,500,000.-

Local Capital : ₩14,460,000,000.-

4. Project Description :

The project to be financed by this loan will meet construction requirements of the company for expansion and reinforcement of the transmission and distribution system during the period of 1975 and 1976. And it will cover construction or addition of twenty four substations (161/22.9Kv or 11.4Kv and 69/22.9Kv transformer banks) and related transmission and distribution switchgears and communication facilities.

The geographical and schematic details are not firmly developed, however, based on the engineering experiences and the forecast of load growth, it is estimated that, at least, 2,500MVA of substation capacities and related transmission and distribution facilities are additionally required to meet the system load demands of 1975 and 1976.

The materials and equipment to be procured by this loan will be a part of the whole requirements for the above expansion of the system during the period.

5. Project Benefit :

- a. By execution of the project, an abundant use of electric power will contribute greatly to development of the national industries.
- b. By the expansion of the electric power supply system in nationwide, the application of the electricity to the lights, fans, radios, cooling and tooling appliances, etc. will also greatly contribute to improve the living standards in the country.
- c. In the result of the project, following advantages are expected:
  - (1) Reduction of the system power loss
  - (2) Improvement of the system reliability and service level.

## TABLE OF CONTENTS

1. Nature of the Project .....	5
A. Project Description .....	5
(1) General .....	5
(2) Contents of the Project .....	6
(3) Costs .....	6
(4) Funding Schedule .....	7
B. Present Status of the Project .....	7
C. Development Policy .....	7
D. Development Plan .....	8
2. Applicant .....	11
A. General .....	11
B. Ownership of the Company .....	12
C. Principal purpose .....	12
D. Organization .....	13
3. Engineering Aspects and Technical Soundness .....	14
A. Engineering, Design and Implementation of the Project .....	14
B. Required Material and Equipment .....	14
C. Commodity List .....	14
D. Technical Soundness .....	16
4. Economic Aspects .....	18
A. Load Forecast .....	18
B. Income Statement .....	22
C. Cash Forecast .....	25

5. Financial Aspects .....	27
A. Comparative Balance Sheet .....	27
B. Operating Costs .....	34

## 1. Nature of the project

### A. Project Description

#### (1) General

This is prepared to request a loan for financing, in part, of purchasing funds for the transmission and distribution materials and equipment required to expand the electric power supply system of the Korea Electric Company (KECO).

At present, the company is supplying approximately 1,555MW in peak through her transmission and distribution facilities have been expanded but due to the lack of timely available funds the expansion is not sufficient to satisfy the demand. Consequently, demand on the transmission and distribution facilities are reaching or in some cases even exceeding their capacities.

The situation requires a considerable expansion and reinforcement of the system facilities year by year.

Therefore, the company is currently planning three major expansion projects under two loans of Asian Development Bank and phase 1 & 2 of the German Government for the development of the transmission and distribution system.

To meet the sustained increase of load the materials and equipment to be purchased by this proposed loan fund would be needed for expansion of the system in 1975 and 1976.

The company has established plans for constructing a 345 Kv EHV transmission system and some of future generating units

are scheduled to be connected directly to the 345Kv buses. This proposed loan will supply the materials and equipment needed for the connections of Inchon #3 unit and Atomic #1 unit to the 345Kv system.

(2) Contents of the project

a. 345Kv T/L Construction	20C-Km
b. 345Kv Switchyard Extension	3Bay
c. 161/22.9Kv S/S Construction or Addition	12Bank
d. 69/22.9Kv S/S Construction or Addition	12Bank
e. 161Kv T/L Construction	198C-Km
f. 69Kv T/L Construction	12C-Km
g. Other T & D Materials	1lot
h. 22.9Kv D/L Extension	1,900Km
i. 22.9Kv D/L Conversion	1,600Km
j. Communication Materials	1lot

(3) Costs

Total costs of the proposed project amount to \$11,500,000 in foreign exchange and W14,460,000,000 in local currency. The local currency will be provided by the Company and the foreign exchange is required to be financed by an international financial institution at the following terms and conditions;

Interest rate : 3% per annum

Grace period : 10 years

Repayment period: 30 years



(4) Funding Schedule

Unit : { In Thousand  
Dollars  
In Million Won

Year	EHV	Transmi- ssion	Other Tra- nsmission	Distribu- tion	Communi- cation	Total
1975	\$	1,615.5	3,556.6	2,008.8	543	7,723.9
	W	258	2,999	5,534	266	9,057
1976	\$		1,639.5	1,085.5	159.4	2,884.4
	W	270	1,289	3,676	168	5,403
Contingency \$						891.7
Total	\$	1,615.5	5,196.1	3,094.3	702.4	11,500
	W	528	4,288	9,210	434	14,460

B. Present Status of the Project

In accordance with the long-range plan of the transmission and distribution, the proposed project has been investigated as additional transmission and distribution facilities during 1975 and 1976. And actual surveys on site and engineering designs will be carried out, before the time of construction works, according to the design standards and the past experiences. No engineering difficulties are expected on this work except for the 345Kv portion since a number of similar projects have been performed successfully and are fairly in operation.

C. Development Policy

The company's development policy for transmission and distribution system are as follows:

- (1) Expand 161Kv system for transmission
- (2) Expand 22.9Kv-Y grounded system for sub-transmission

- (3) Expend 220/380Kv-Y grounded system for secondary distribution
- (4) Expansion of existing system of the other voltages such as 69Kv- $\Delta$ , 22Kv- $\Delta$ , etc, will be limited only for the inevitable cases, and these voltage steps will be gradually minimized.

#### D. Development Plan

##### (1) Transmission

The company operates an extensive transmission network connecting the four major service areas of the country except islands. The transmission network is presently composed of 161Kv, as backbone system, with 69Kv lines extending to major distribution points where the voltage is stepped down to 22Kv for outlying areas.

In parallel with the increase of generation capacity to be developed during the forecast period, the extension and reinforcement of the transmission system will be also required. A single circuit of 345Kv line is projected to form a new backbone system and it will connect the three major areas; the northwest, the southeast and the southwest. In accordance with the adopted policy, the recent expansion programs have been conducted to 161Kv and 22.9Kv system as standard line voltage for transmission network and sub transmission system respectively, and the 69Kv and 22Kv delta system will eventually be phased out. Therefore, the substation standard have been stressed to 161Kv/22.9Kv rating accordingly.

## (2) Distribution

In order to relieve the sustained increasing load congestion from over loading of and subtransmission distribution lines and to minimize the system loss, considerable funds should be invested to effectively utilize the newly introduced standard of construction, in parallel with capital expenditure for generation and transmission requirements. The subtransmission in the large cities will be converted to 22.9Kv-Y multigrounded system, and the system will be gradually extended in rural areas in accordance with the Government's Rural Electrification program which will raise the electrification rate of present 31% to 100% by 1979.

The secondary distribution will be also converted to 220/380 volt-Y system.

With these standardization and continuing system expansion, the transmission and distribution system loss could be remarkably reduced. The rate of the system loss have been reduced from 18.1% in 1966 to 11.5% at yearend 1971.

This value will be further reduced to 8.0% by 1981 which is the present level in most developed country.

## (3) Communication

In parallel with the expansion of generating, transmission and distribution system, the control and communication network have to be expanded and modernized in order to increase the

system reliability, to introduce better productive management and to improve the means of communication itself.

The essential parts of the plan are as follows:

- a. Carrier relay equipment was installed and will be installed for the protection of transmission line.
- b. VHF and UHF facilities were installed and will be expanded for maintenance of transmission and distribution lines.
- c. ELD. AFC will be applied to system operation.
- d. Telecontrol facilities will be installed to a certain terminal substations in order to remotecontrol.
- e. Facsimile device will be connected to Head Office and branch offices including major stations.
- f. PBX will be gradually alternated with DDD system.
- g. Microwave and carrier telephone circuits will form backbone communication network.

#### (4) Generating Plant

The power development plan is as follows:

Plant Classif- cation	Installed Capacity As of May 31, 1971	'71	'72	'73	'74	'75	'76	Sub- Total
Hydro	329 MW	12MW	-	80MW	200MW	-	-	292MW
Thermal	2,034	200	1,461	250	-	300	313	2,524
Diesel	103	-	-	-	-	-	-	-
Gasturbine	150	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	600	600
Total	2,616	212	1,461	330	200	300	913	3,416
System Total	2,616	2,828	4,289	4,619	4,819	5,119	6,032	

Note : Plants owned by private companies are included.

## 2. Applicant

### A. General

The company which has about 2,200,000 electric customers as of the end of 1970 sold 7.74 billion KWHR requiring a gross system input of 9.17 billion KWHR by the installed generating capacity of 2,288MW during 1970, while the gross peak was 1,555MW.

It is expected that the electric demand will continuously increase and in order to meet the load growth a 3,416MW of new generating capacity has to be developed together with the transmission and distribution system by 1976.

Therefore, the company has prepared the third five-year power development program which will be performed during 1972 thru 1976.

Under the situation as above, the company is aiming at the operational goal in 1971 as follows:

- (1) Total investment: W39,703 million
  - a. Generating: W18,118 million
  - b. T/D Facilities: W18,305 million
  - c. Rural Electrification: W2,480 million
  - d. Others: W800 million
- (2) Gross Generation: 11,933 GWH
- (3) Gross Sales: 10,115 GWH
- (4) Total Income: W62,927 million
- (5) Total Expenditures: W52,506 million
- (6) Net Income: W10,421 million

#### B. Ownership of the Company

When the Republic of Korea was formed in 1945, the ownership interests of Japanese Nationals in the predecessor companies to Korea Electric Company were taken over by the Korean Government. When these companies were merged, the government's share of ownership amounted to over 90 percent of the common stock of the new company.

Since then, the government has sold some of its stock to corporation and individuals and has publicly announced its intention to continue to do so. The ownership of the company as of May 31, 1971 is as follows:

Owner	Nr. of Stockholders	Nr. of shares	Percentage
Government	1	31,942,342	50.17%
Individuals	16,198	31,725,353	49.83%

The stock of Korea Electric Company is listed and traded on the Korea Stock Exchange. The stockholder's meeting is held every year and officers of the company are elected. The Ministry of Commerce and Industry exercises the voting rights of the government-owned shares.

#### C. Principal purpose

The principal purposes of the company are as follows:

- (1) Development of electric power resources
- (2) Generation, transmission and distribution of electric power
- (3) Production, supply and sale of gas and its by-products

- (4) Manufacture, sale and lease of equipment and appliances related to electric power and gas
- (5) Promotion of the tourist industry by utilizing the facilities possessed by the company
- (6) Investment in projects related to those itemized under each preceding paragraph.
- (7) Business activities incidental to those itemized under each preceding paragraph.

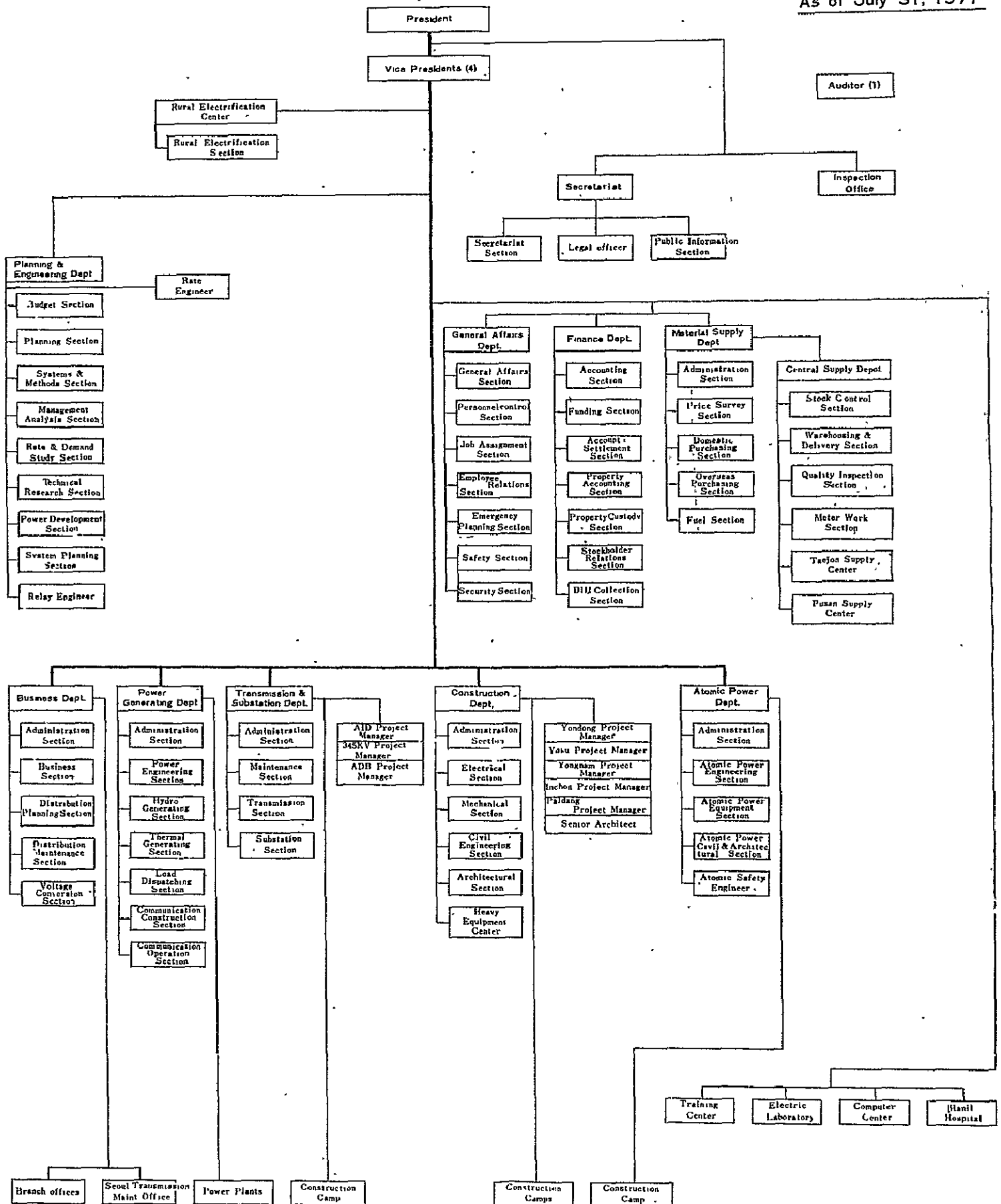
D. Organization

The organization chart is as per attached sheet, and the officers of the company consist of six directors and one auditor who are elected at the stockholders meeting. The president and the executive vice president of the company are appointed to the office among from the directors by the president of the republic.

The term of office for directors is three years and auditors two years.

As of May 31, 1971, the company has 12,635 employees, and each employee is working with his best effort to accomplish the company's operational goal.

As of July 31, 1971





### 3. Engineering Aspects and Technical Soundness

#### A. Engineering, Design and Implementation of the project.

All engineering studies, design works, preparing specification, procurement and construction works with the exertion of the 345kv portion will be carried out by the company or partially by the local contractors under the general supervision of the company.

#### B. Required Materials and Equipments

For construction of the proposed project, the material and equipment shown in the commodity list shall be procured from the foreign country by the proposed loan fund.

And, others such as steel tower, poles, line conductors, power transformers, lower rating equipment, etc. shall be supplied by domestic manufacturers.

#### C. Commodity List

##### (1) Transmission Materials

Insulator, 36,000-lbs, 10"	5,760ea
" 25,000 lbs, 10"	89,000ea
Line Hardware	1 lot

##### (2) Substation Equipment

345Kv CB	3set
345Kv Air Switch	12 "
345Kv CPD	3ea

345Kv Wave Trap	3ea
345Kv LA	1set
345Kv Control & Relaying panel	1lot
345Kv Carrier Eq, W/Access	1 "
345Kv Bus Materials	1 "
161Kv OCB	42set
161Kv Circuit Switcher	2 "
161Kv DS	91 "
161Kv CPD	6"
161Kv LA	25 "
69Kv OCB	27 "
69Kv Power Fuse	5 "
69Kv LA	13 "
23Kv OCB	16 "
23Kv LA	37 "
14.4Kv OCB	3 "
14.4 LA	1 "
Control & Relaying Eq.	1 "
Mobile Substation	1 "
Static Condenser	2Bank
(3) Distribution Material	
Pin Insulator, 25Kv	217,00ea
Disc Insulator, 7½Kv	195,000ea
Interrupter Switch, 24.9Kv	200set
Lightning Arrester, 18Kv	7,400ea

Sectionalizer, 24.9Kv	178set
Wooden pole	930ca
Al, Fitting & Tools	1lot
Meters	1lot
(4) Communication Equipment	
Coupling Capacitor	16ea
Blocking Filter	6ea
Carrier Relaying T/R set	19set
CPD	19ea
V.H.F. Equipment	59set
Telex Equipment	1set
Telecon Equipment	4set
Parts & testing Instruments	1lot

#### D. Technical Soundness

As previously described in the project description, major parts of the proposed project are the conversion and extension of 22.9Kv-Y subtransmission system together with 161/22.9Kv substation construction providing its sources.

Taking into account the various factors of the economic development plan and other circumstances of the country it can be easily expected that the high rate of growth of power demand will be maintained and the necessity of the bulk power sources in the concentrated load area will continue more and more. Accordingly, to meet such a large

growth of power demand with a better service level, it is required to strengthen the distribution facilities.

A substantial economic gains in the forms of increasing line capacity, reducing loss and better voltage regulation can be achieved when the present voltages of the distribution are supplanted by high one. Some studies recently indicated that 22.9Kv-Y distribution in primary and 220/380V-Y in secondary are the most economic and favorable method, and the company has adopted the direction of the above distribution.

Therefore, the recent expansion programs are mostly directed toward 22.9Kv-Y distribution network fed directly from 161/22.9 Kv transformers in parallel with a considerable amount of distribution voltage conversion of existing system.

#### 4. Economic Aspects

##### A. Load Forecast

The method of forecast used herein for future requirement on the supply system of the company is build-up projection method, developing by area and individual classes of customers.

For the purpose of this forecast, the load demand was classified in four categories as lighting, small power under 500KW demand, large power over 501KW demand and agricultural power. The load demands on each of service categories were compiled by area and consumption of large power by industry.

Finally the total load demand was also taken into consideration in checking the regression analysis with GNP or Index of Mining & Manufacturing.

##### (1) Lighting

Lighting consists of three classes of customers, such as general service A, flat rate and street lighting.

Lighting energy sales were estimated after analyzing the trends of the number of customers, the energy consumption per customers and per capita.

In analyzing the actual data for the years 1959 through 1969, the energy sales were estimated by the regression equation derived from the relationship between the private consumptions.

##### (2) Small Power

Small power consists of general service B under 500KW

demand and high tension service under 500KW demand.

In this estimation, the same method to the lighting was used.

### (3) Large Power

The large power consists of the general service B and high tension service with the demand of 501KW and over. And they are mainly large industrial enterprises and other business firms.

The sales of the large power customers those with the demand over 501KW were estimated individually.

For the purpose of estimating the future load requirement of the large existing and prospective customers, the installed facilities, operational status and energy consumptions had been analyzed, and the realistic demand factors, load factors and energy consumption per unit production were estimated.

The energy sales and the maximum demands were estimated based on the above various factors.

### (4) Agricultural Power

This category consists mostly of irrigation pumping and the energy use depends upon the amount of rainfall.

It was estimated by the plan and projecting from the historical data.

The rate of growth of the electric energy sales is influenced by both regional and national developments.

SUMMARY OF THE LOAD FORECAST

Classification	Unit	'70 Actual	'71	'72	'73	'74	'75	'76	'77	'78	'79	'80	'81
Total	GWH	7,740	10,115	12,370	14,830	17,500	20,365	23,440	26,660	30,080	33,580	37,000	40,180
Increased Rate	%	-	30.7	22.3	19.9	18	16.4	14.1	13.7	12.8	11.6	10.2	8.6
Total T/D Loss	%	11.84	11.5	12.5	12	11.5	11	10.5	10	9.5	9	8.5	8
Net Generation	GWH	8,780	11,429	14,140	16,850	19,770	22,880	26,880	29,660	33,240	36,000	40,440	43,670
Aux. Use Rate	%	4.24	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.6	4.6	4.6	4.6
Gross Generation	GWH	9,167	11,993	14,830	17,480	20,750	24,010	27,480	31,050	34,840	38,680	42,390	45,730
Increased Rate	%		30.8	21.9	19.2	17.4	15.7	14.5	13	12.2	11	9.6	8
Average Demand	MW	1,047	1,369	1,690	2,020	2,370	2,740	3,135	3,540	3,975	4,420	4,840	5,230
Annual Load Factor	%	67.3	65	65.5	65.5	65.5	65.5	75.5	66	66	66	66	66
peak Demand	MW	1,555	2,120	2,586	3,080	3,620	4,185	4,785	5,370	6,020	6,690	7,330	7,920
Increased Rate	%		26.3	21.9	19.1	17.5	15.6	14.3	12.2	12.1	11	9.6	8

The influencing factors which are considered in this forecast include population growth, standards of living, nationwide business activities and other factors.

The actual and forecasted economic factors for the years of 1955 through 1981 prepared by the Economic Planning Board of the Republic of Korea were used.

The summary of the load forecast is as per attached hereto:



B. COMPARATIVE INCOME STATEMENT (ACTUAL)  
YEARS 1965-1970  
(Amounts in Million Won)  
Korea Electric Company

<u>ITEM</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>
<u>Electric Department Operating Revenues</u>	<u>11,641</u>	<u>16,177</u>	<u>21,800</u>	<u>29,407</u>	<u>37,472</u>	<u>49,504</u>
Operating Expenses						
Steam Generation Expenses	3,267	4,157	5,896	7,506	9,707	13,161
Hydro Generation Expenses	136	144	193	238	368	624
Internal Combustion Generation Expenses	175	238	1,327	5,263	2,668	1,632
Total Generation Expenses	3,578	4,539	7,416	10,957	12,743	15,417
Power Purchased	-	-	9	109	-	-
Total Production Expenses	3,578	4,539	7,425	10,966	12,743	15,417
Transmission Expenses	268	340	455	684	965	1,472
Distribution Expenses	1,029	1,346	1,641	2,321	2,802	3,382
Customer's Accounts Expenses	560	663	1,024	1,470	1,506	1,759
Sales Expenses	60	101	130	170	227	306
Administrative and General Expenses	705	1,086	1,738	1,893	2,959	3,862
Total Operation and Maintenance Expenses	6,200	8,075	12,413	17,505	21,202	26,193
Depreciation	1,673	2,699	3,091	3,807	5,327	6,527
Taxes - Other Than Income	28	50	98	194	198	266
Income Taxes	256	1,038	2,303	1,550	200	1,900
Other Operating Expenses	6	-	-	-	14	39
Total Operating Expenses	8,163	11,862	17,905	23,056	26,941	34,930
<u>Operating Income-Electric</u>	<u>3,478</u>	<u>4,315</u>	<u>3,895</u>	<u>6,351</u>	<u>10,351</u>	<u>14,574</u>
<u>Street-Railway Department</u>						
<u>Operating Revenues</u>	<u>475</u>	<u>281</u>	<u>121</u>	<u>54</u>	<u>-</u>	<u>-</u>
<u>Operating Expenses</u>						
Operation and Maintenance Expenses	688	967	253	229	-	-
Depreciation	102	79	52	23	-	-
Taxes-Other Than Income	-	-	1	1	-	-
Total Operation Expenses	790	1,046	306	253	-	-
<u>Operating Income-Street-Railway</u>	<u>(315)</u>	<u>(765)</u>	<u>(185)</u>	<u>(199)</u>		
<u>Total Utility Operating Income</u>	<u>3,163</u>	<u>3,550</u>	<u>3,710</u>	<u>6,152</u>	<u>10,531</u>	<u>14,574</u>
Other Income	138	64	85	46	158	298
<u>Total Income</u>	<u>3,301</u>	<u>3,614</u>	<u>3,795</u>	<u>6,198</u>	<u>10,689</u>	<u>14,872</u>
Income Deduction Interest	672	993	1,176	2,431	4,567	6,720
Other Income Deduction	63	69	71	75	108	160
Total Income Deduction	735	1,062	1,247	2,506	4,675	6,880
<u>Net Income</u>	<u>2,566</u>	<u>2,552</u>	<u>2,548</u>	<u>3,692</u>	<u>6,014</u>	<u>7,992</u>

B. Perform Income Statement (by type of functions)

Unit : 100Yen

Item \ Year	71	72	73	74	75	76	77	78	79	80	81	Ten-year Total (72 ~ 81)
1. Revenue												
a. Electric Operating Revenue	51,702	62,731	97,715	113,960	131,497	150,321	169,798	190,587	211,655	231,990	251,045	1,631,299
1) Sales of Electricity (GWH)	10,115	12,370	14,830	17,520	20,365	23,440	26,660	30,080	33,580	37,000	40,180	256,005
2) Unit Price of Sales (Yen/KWH)	5,20	5,088	6,589	6,512	6,457	6,413	6,369	6,336	6,303	6,270	6,248	6,372
b. Other Revenues	1,225	2,090	1,859	1,357	860	644	700	779	857	943	1,037	11,134
Total	52,927	64,821	99,574	115,317	132,357	150,965	170,505	191,366	212,512	232,933	252,082	1,642,433
2. Expenses												
a. Operating & Maintenance Expenses	34,974	47,646	58,881	72,094	81,284	89,507	96,503	106,189	117,427	127,654	137,590	935,055
1) Production	17,549	17,998	21,304	22,659	26,756	31,339	36,343	41,233	46,482	55,059	61,000	366,370
2) Purchased Power	4,732	12,375	19,279	27,642	29,944	30,439	29,117	30,040	29,533	28,986	29,422	265,777
3) Transmission	2,119	2,411	2,807	3,307	3,618	4,245	4,710	5,226	5,872	6,413	7,009	46,970
4) Distribution	4,222	5,022	5,951	7,137	8,242	9,309	10,490	11,876	13,627	15,132	16,817	103,563
5) Customers Accounts	2,916	2,421	2,862	3,365	3,645	4,370	4,976	5,538	6,158	6,772	7,397	47,664
6) Sales	266	306	369	410	506	579	640	749	848	953	1,068	6,430
7) Administrative & General	4,070	5,311	6,229	7,264	8,173	9,226	10,327	11,530	12,907	14,339	15,877	101,183
b. Depreciation	7,328	9,895	11,880	13,296	14,747	16,030	20,148	22,604	24,071	26,279	26,198	137,543
c. Interest	9,031	11,467	14,771	16,792	18,739	20,044	24,398	25,543	26,903	28,188	27,918	215,563
d. Income & Other than Income	324	420	505	582	663	765	870	969	1,072	1,173	1,267	8,293
e. Others	349	580	414	451	472	530	588	643	704	771	844	5,827
Total	52,906	70,011	86,452	103,275	115,925	128,404	142,587	155,346	170,177	184,065	195,017	1,322,000
3. Net Income	10,421	14,807	13,122	12,192	16,432	22,461	27,919	36,013	42,335	48,868	56,265	320,433

3. Perform Income Statement (by Type of Elements)

Item		71	72	73	74	75	76	77	78	79	80	81	Unit : 10 <sup>4</sup> won Ten-year Total ( 72 ~ 81 )
1. Revenue													
a. Electric Operating Revenue		61,702	82,731	97,713	113,960	131,497	150,321	169,798	190,587	211,635	231,990	251,045	1,631,299
1) Sales of Electricity (OWE)		10,115	12,370	14,830	17,500	20,365	23,440	26,660	30,000	33,500	37,000	40,100	256,005
2) Unit Price of Sales (WUO/KWH)		6.20	6.688	6.589	6.512	6.457	6.413	6.369	6.336	6.303	6.270	6.240	6.372
b. Other Revenue		1,225	2,090	1,859	1,357	860	644	700	779	837	943	1,037	11,134
Total		62,927	84,821	99,574	115,317	132,357	150,965	170,506	191,366	212,512	232,933	252,082	1,642,433
2. Expenses													
a. Fuel		12,873	14,444	14,944	15,524	16,389	21,778	25,670	29,351	34,052	39,916	44,331	259,199
b. Purchased Power		4,732	12,375	19,279	27,642	29,944	30,439	29,117	30,040	29,533	28,906	28,422	265,777
c. Payroll		7,591	9,313	11,122	13,194	15,009	17,220	19,540	22,091	25,064	28,240	31,672	192,473
d. Retiring Allowance		1,025	2,980	3,567	4,234	4,815	5,525	6,272	7,000	7,841	9,060	10,161	61,751
e. Repair & Maintenance		3,012	3,264	3,913	4,940	5,940	6,648	7,374	8,415	10,074	11,002	12,036	73,615
f. Payment fee		735	663	1,000	1,147	1,304	1,479	1,643	1,817	1,990	2,129	2,250	15,613
g. Customers Accounts		67	70	92	106	121	136	152	160	184	197	206	1,443
h. Others		4,072	4,520	5,561	5,299	5,762	6,291	6,807	7,219	7,569	8,124	8,310	65,152
i. Depreciation		7,028	9,095	11,800	13,296	14,747	16,030	20,148	22,004	24,071	26,279	28,190	157,340
j. Interest		9,031	11,467	14,771	15,792	16,739	20,044	24,390	25,543	26,902	26,108	27,916	215,563
k. Taxes other than Income		324	424	506	592	663	765	870	969	1,072	1,173	1,267	8,202
l. Reserve		349	300	414	451	492	538	589	645	704	771	844	5,025
Total		52,506	70,014	86,432	103,215	115,925	128,404	142,587	155,340	170,177	184,065	195,817	1,352,064
3. Net Income		10,421	14,807	13,142	12,102	16,432	22,561	27,919	36,016	42,335	48,868	56,265	290,369

O. Cash Flow : Out (1)

Year		Unit 100 Won											
Item		71	72	73	74	75	76	77	78	79	80	81	Ten Year Total (72 - 81)
Fund Sources													
a. Funds Provided by Operation													
1) Net Income		22,922	28,451	29,244	30,167	36,479	45,197	54,402	66,79	74,211	87,406	93,347	540,373
2) Depreciation		10,421	14,807	13,122	12,102	16,432	22,481	27,919	36,018	42,335	48,868	56,265	290,367
3) Account for Uncollectable		7,828	9,895	11,880	13,254	14,747	16,690	20,148	22,004	24,071	26,279	28,198	187,348
4) Retirement Allowance Reserve		29	-	-	-	-	-	-	-	-	-	-	-
5) Insurance Reserve		222	660	788	935	1,064	1,220	1,385	1,545	1,775	2,000	2,243	13,634
6) Customers Accounts Expenses		93	96	129	145	155	171	216	232	249	269	289	1,952
a) Contribution in Aid of Construction		2,000	2,248	2,514	2,801	3,109	3,429	3,765	4,078	4,375	4,537	4,667	35,516
b) Advances from Customers for Construction		1,400	1,574	1,740	1,961	2,177	2,401	2,636	2,855	3,062	3,176	3,262	24,365
7) Street - Railway Profit		600	674	754	840	932	1,028	1,129	1,223	1,312	1,361	1,398	10,651
8) Others		-	42	41	41	41	41	41	41	41	41	41	412
		2,349	200	770	147	932	1,025	1,128	1241	1,365	1,502	1,452	11,162
b. Issuance of New Stocks													
1) Government													
2) Private													
c. Funds from External Sources													
1) Foreign Loan		31,341	41,404	48,743	58,785	49,828	79,727	35,221	41,218	45,042	17,632	18,607	376,269
2) Domestic Loan		17,250	15,634	21,014	27,947	24,660	15,432	16,232	20,339	21,235	12,632	18,607	198,732
3) Other Loan		13,991	25,772	27,765	36,838	15,168	24,295	18,989	20,879	23,827	-	-	197,537
		8,676											
Total		47,959	69,857	78,927	88,952	86,307	124,924	89,623	106,397	119,273	101,128	111,954	936,642

C. Cash Forecast (2)

Unit : 10 \$ Won

Item	Year	71	72	73	74	75	76	77	78	79	80	81	Ten Year Total (72 - 81)
<b>2. Disposition of Funds</b>													
a. Funds provided by Operation		14,580	22,088	24,352	24,672	27,003	30,876	33,411	40,938	44,985	46,244	49,508	347,077
1) Amortization		8,834	15,659	17,923	19,412	19,942	22,213	25,310	27,312	29,374	29,670	30,416	227,231
a) Foreign Loan		6,920	8,887	9,932	10,402	10,861	13,674	15,665	16,099	16,626	15,589	15,351	133,136
b) Domestic Loan		1,914	6,772	7,991	9,010	9,081	8,539	9,645	11,219	12,748	14,081	15,065	104,095
2) Income tax		1,088	1,264	1,130	1,752	2,241	2,708	1,892	7,172	8,859	9,558	11,081	48,464
3) Dividend		3,106	3,173	3,173	3,173	3,173	3,173	3,173	3,173	3,173	3,173	3,173	31,730
4) Revaluation tax		100	50										50
5) Property Purchase Obligations - KCS		223	243	253	264	275	286	298	311	324	337	350	2,741
6) Retirement Insurance Deposits		57	57	57	57	57	57	57	57	57	57	57	570
7) Preliminary Surveys & Investigation		72	20	38	97	107	118	130	142	157	173	190	1,223
8) Payment of Advances for Construction		500	362	526	700	777	657	941	1,019	1,093	1,133	1,164	6,874
9) Others		600	1,000	1,100	1,210	1,331	1,464	1,610	1,771	1,948	2,143	2,357	15,934
b. Construction Expenditure		39,793	47,769	53,675	62,280	58,404	54,048	50,412	65,439	74,288	54,884	62,366	529,565
1) Generating Facilities		18,118	13,470	16,532	20,098	25,023	18,734	17,125	23,070	30,921	25,332	34,750	237,055
2) T & D		18,305	26,604	28,528	21,930	22,595	23,475	25,261	28,102	28,950	27,622	45,496	250,523
3) Rural Electrification		2,490	6,795	7,625	2,163	9,588	10,521	10,556	12,667	12,667	-	-	77,502
4) Other Facilities		800	900	990	1,089	1,198	1,318	1,450	1,600	1,750	1,930	2,120	14,346
5) Carried - Over Project		6,575											
Total		52,959	69,857	78,027	86,952	86,407	84,924	83,823	106,377	119,273	101,108	111,864	676,642

5. Financial Aspects  
A. COMPARATIVE BALANCE SHEET (Actual)  
(1965 - 1970)  
Korea Electric Company

ASSETS AND OTHER DEBITS	1965	1966	1967	1968	1969	1970
<b>UTILITY PLANT</b>						
Electric Plant						
Electric Plant in Service	46,686	50,524	93,117	108,374	137,320	195,295
Steam Generating Plant	15,600	15,636	29,442	31,725	32,445	68,584
Hydro Generating Plant	7,035	8,165	13,105	15,554	22,094	28,486
Internal Combustion Generating Plant	832	841	1,776	3,285	7,610	7,723
Transmission Plant	7,898	8,257	15,242	17,814	24,192	33,687
Distribution Plant	13,671	15,719	28,889	33,848	43,037	53,673
General Plant	1,650	1,906	4,683	6,147	7,042	3,142
Accumulated Provision for Depreciation						
Bal.	14,530	16,823	31,091	35,886	42,512	48,743
Steam Generating Plant	4,264	5,274	10,415	12,395	16,932	17,779
Hydro Generating Plant	2,828	3,052	5,284	6,285	7,354	8,538
Internal Combustion Generating Plant	108	210	402	617	861	1,195
Transmission Plant	2,508	2,870	5,345	5,896	6,001	7,445
Distribution Plant	4,280	4,819	8,619	9,545	12,537	12,974
General	512	598	1,026	1,151	658	812
Completed Construction Not Classified	4,987	4,339	37	23,217	37,741	10,222
Construction Work in Progress Electric	1,170	5,431	29,183	34,246	40,385	51,027
Electric Plant-Net	38,313	43,671	91,248	129,950	175,708	207,801
Street Railway Plant	2,458	630	1,232	-	-	-
Accumulated Provision for Depreciation	1,704	438	809	-	-	-
Construction Work in Progress Street	-	-	-	-	-	-
Railway	-	2	1	-	-	-
Street Railway Plant-Net	754	194	424	-	-	-
Utility Plant-Net	39,067	43,865	91,670	-	-	-
<b>OTHER PROPERTY AND INVESTMENTS</b>						
Non-Utility Property-Net	220	663	658	521	318	677
Investment in Associated Companies	23	28	28	28	0	0
Other Investments	10	41	87	653	557	658
Other Special Funds	220	250	280	327	399	944
Accumulated Provision For Depreciation	-	-	-	181	95	157
Total Other Property and Investments	478	992	1,053	1,319	1,059	2,122
<b>CURRENT AND ACCRUED ASSETS</b>						
Cash in Bank	894	980	1,233	2,037	1,565	4,308
Cash on Hand	4	6	10	8	6	6
Special Deposits	101	77	8	-	146	759
Working Funds	-	-	-	-	-	-
Temporary Cash Investments	-	-	-	-	161	71
Notes Receivable	3	18	243	402	453	33
Customers' Accounts Receivable	374	477	672	907	2,547	3,830
Other Accounts Receivable	220	255	233	194	214	252
Provision for Uncollectable Accounts-Cr.	6	4	14	17	16	15
Materials and Supplies	2,069	2,250	2,724	2,229	1,797	7,707
Prepayments	1	17	31	55	60	102
Advances on Purchase Contracts	504	716	2,442	2,121	2,375	2,656
Other Current and Accrued Assets	207	290	747	1,512	1,095	2,600
Account Receivable from Associated Co.	2	2	6	17	0	-
Stores Expenses	60	107	121	164	156	293
Foreign Exchange	-	-	83	2	0	15
Total Current and Accrued Assets	4,433	5,191	8,539	11,631	11,567	22,622
<b>MISCELLANEOUS DEBITS</b>						
Construction Costs-NCS Contracts	4,271	4,292	1,292	2,000	2,110	2,000
Investment in North Korea Property	1	1	1	1	1	1
Contingent Assets-Contractors' Guarantees	1,334	89	84	85	0	85
Total Miscellaneous Debits	5,606	4,382	4,377	2,086	2,111	2,086

<u>ASSETS AND OTHER DEBITS</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>
DEFERRED DEBITS						
Organization Cost	-	-	-	-	-	60
Extraordinary property Losses	-	-	-	70	181	155
Preliminary Surveys and Investigations	292	230	194	185	194	263
Clearing Accounts	-	-	-	-	-	-
Retirement Work in Progress	-	-	-	90	-	-
Miscellaneous Deferred Debits	31	622	3,610	5,610	6,491	10,339
Exchanges Rate Adjustment Accounts	335	373	237	973	5,135	5,430
<u>Total Deferred Debits</u>	<u>708</u>	<u>1,225</u>	<u>3,457</u>	<u>6,927</u>	<u>12,001</u>	<u>16,248</u>
<u>TOTAL ASSETS AND OTHER DEBITS</u>	<u>50,292</u>	<u>55,645</u>	<u>109,096</u>	<u>151,942</u>	<u>205,801</u>	<u>250,879</u>

<u>LIABILITIES AND OTHER CREDITS</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>
<b>PROPRIETARY CAPITAL</b>						
Common Stock	11,507	11,507	20,138	50,191	59,461	53,568
Dividends Due Government of Korea	1,565	2,349	3,134	4,207	5,837	2,561
Surplus from Revaluation of Property	8,631	8,631	21,566	6,255	2,851	23
Earned Surplus - Appropriated						
Legal Reserve	300	583	942	1,971	2,234	3,545
Reserve for Equalization of Dividend	180	180	180	180	180	180
Reserve for Retirement of officers	7	19	37	27	32	28
Special Reserve	190	190	190	1,904	1,905	1,904
Income Tax	-	23	-	3	661	288
Total Earned Surplus - Appropriated	677	995	1,349	4,085	5,012	5,545
Earned Surplus - Unappropriated						
Surplus (Deficit) from Previous Period	3	1,129	2,230	479	456	628
Net Income (Deficit) Current Year	2,822	3,590	4,851	5,242	6,214	5,891
Total Surplus - Unappropriated	2,825	4,719	7,081	5,721	6,669	10,520
<u>Total proprietary Capital</u>	<u>25,205</u>	<u>28,231</u>	<u>53,268</u>	<u>70,458</u>	<u>79,857</u>	<u>87,317</u>
<b>LONG TERM DEBT</b>						
Long-Term Loans-Domestic	9,817	12,346	27,394	30,635	40,915	45,394
Long-Term Loans-Foreign	4,656	4,543	10,299	20,217	53,796	53,891
Notes Payable-Non-Current	476	329	-	-	-	1,783
Other Long Term Debt	735	-	-	4,493	3,936	3,354
<u>Total Long-Term Debt</u>	<u>15,684</u>	<u>17,218</u>	<u>37,693</u>	<u>55,335</u>	<u>98,697</u>	<u>110,722</u>
<b>CURRENT AND ACCRUED LIABILITIES</b>						
Notes Payable	487	366	630	2,029	1,229	1,402
Accounts Payable-Purchases	231	42	257	444	115	77
Accounts Payable-Other	214	375	706	1,313	210	628
Customers Deposits	2	7	8	15	18	16
Taxes Accrued	5	17	357	135	128	85
Interest Accrued	95	106	322	613	763	1,428
Dividends Declared	17	26	35	44	56	67
Matured interest Unpaid	-	-	-	-	-	-
Tax Collections Payable	210	274	430	600	776	867
Contractors' Guaranty Deposits	140	164	158	158	260	325
Long-Term Loans Maturing Current Year	1,293	2,231	5,783	11,708	12,145	22,358
Other Current and Accrued Liab.	152	183	292	434	795	1,954
<u>Total Current and Accrued Liab.</u>	<u>2,846</u>	<u>3,791</u>	<u>8,978</u>	<u>17,492</u>	<u>16,495</u>	<u>23,907</u>
<b>MISCELLANEOUS CREDITS</b>						
Advances from NCS-Construction	4,172	4,284	4,284	2,000	2,000	2,000
Liabilities in North Korea	1	1	1	1	1	1
Contra Liabilities-Contract	1,334	39	84	85	85	85
Guarantees						
Depreciation Reserve for Gov. Own Property	31	31	31	-	-	-
<u>Total Miscellaneous Credits</u>	<u>5,533</u>	<u>4,405</u>	<u>4,400</u>	<u>2,086</u>	<u>2,086</u>	<u>2,086</u>
<b>DEFERRED CREDITS</b>						
Customer Advances for Construction	188	335	472	679	1,134	1,801
Other Deferred Credits	75	433	1,838	2,907	3,521	5,987
<u>Total Deferred Credits</u>	<u>263</u>	<u>773</u>	<u>2,360</u>	<u>3,586</u>	<u>4,655</u>	<u>7,788</u>
<b>OPERATING RESERVES</b>						
Property Insurance Reserve	73	90	114	149	184	241
Employers Retirement Reserve	-	-	-	197	1,082	2,367
Repair and Maintenance Reserve	-	1	1	13	48	-
Other Reserves	-	-	-	3	2	2
<u>Total Operating Reserves</u>	<u>73</u>	<u>91</u>	<u>115</u>	<u>361</u>	<u>1,316</u>	<u>2,610</u>
<b>CONTRIBUTION IN AID OF CONSTRUCTION</b>						
Contribution in Aid of Construction	583	1,166	2,232	2,262	2,695	2,949
<u>TOTAL LIABILITIES AND OTHER CREDITS</u>	<u>50,292</u>	<u>55,645</u>	<u>109,096</u>	<u>151,942</u>	<u>205,801</u>	<u>250,879</u>



4. Proforma Balance Sheet (1)

Assets & Other Debits

Unit: 10<sup>6</sup> Won

Account	70	71	72	73	74	75	76	77	78	79	80	81
1. Utility Plant	207,600	248,353	283,225	328,020	377,004	426,461	457,879	494,143	537,578	587,793	616,409	656,368
Electric Plant in Service	193,206	232,303	312,154	369,216	431,408	449,320	535,663	607,950	663,819	727,466	790,796	838,694
Thermal	67,584	100,420	122,566	152,545	132,545	146,776	182,310	1,326	177,336	107,616	217,896	236,176
Hydro	18,486	29,996	43,702	43,702	43,702	43,702	43,702	43,702	57,202	57,202	70,202	70,702
Diesel	7,723	7,723	7,723	7,723	7,723	7,723	7,723	7,723	7,723	7,723	7,723	7,723
Atomic							55,769	55,769	55,769	55,769	55,769	55,769
Transmission	39,686	39,700	50,147	67,894	75,350	83,032	91,014	99,610	109,145	119,008	128,377	137,068
Distribution	51,670	70,156	90,174	111,539	135,167	139,668	185,662	212,923	244,137	27,594	274,142	310,969
General Plant	3,142	3,942	4,842	5,832	6,921	8,119	9,437	10,887	12,487	14,237	16,167	18,287
Accumulated Provision for Depreciation	△ 48,243	△ 56,571	△ 66,466	△ 78,340	△ 91,643	△ 106,389	△ 123,217	△ 143,367	△ 165,371	△ 189,442	△ 215,721	△ 243,919
Thermal	17,779	21,082	25,233	29,978	34,909	40,106	45,661	52,179	58,776	65,750	73,479	81,962
Hydro	8,538	9,141	9,902	10,800	11,700	12,600	17,500	14,400	15,437	16,617	17,934	19,390
Diesel	1,155	1,554	1,913	2,272	2,634	2,790	3,349	3,708	4,067	4,426	4,785	5,144
Atomic							288	2,017	3,746	5,475	7,204	8,933
Transmission	7,443	9,596	10,036	11,912	14,132	16,587	19,285	22,240	25,476	29,013	32,349	36,263
Distribution	12,844	15,222	18,204	21,956	26,545	32,329	33,453	45,867	54,368	64,041	74,614	85,899
General Plant	812	976	1,130	1,428	1,725	2,075	2,443	2,956	3,499	4,120	4,827	5,428
Completed Construction - Not Classified	10,229	0	0	0	0	0	0	0	3	0	0	0
Construction Work in Progress - Electric	51,026	2,719	30,537	37,140	67,238	77,825	25,425	29,560	39,130	99,771	41,523	55,793
2. Other Property & Investment	2,122	2,179	2,199	2,209	2,225	2,240	2,257	2,271	2,289	2,305	2,321	2,337
Non Utility Property	677	677	677	677	677	677	677	677	677	677	677	677
Accumulated Provision for Depreciation	△ 157	△ 157	△ 157	△ 157	△ 157	△ 157	△ 157	△ 157	△ 157	△ 157	△ 157	△ 157
Other Investment	658	658	615	574	533	492	451	419	369	326	287	246
Other Special Funds	944	1,001	1,050	1,115	1,172	1,229	1,286	1,343	1,400	1,457	1,514	1,571

Proforma Balance Sheet (2)

Assets & Other Liabilities

Unit: 10<sup>6</sup> Won

Account	70	71	72	73	74	75	76	77	78	79	80	81
3. Current & Accrued Assets	22,623	20,845	21,145	21,475	21,638	22,237	22,076	23,158	23,688	24,271	24,912	25,617
Cash in Bank	4,309	4,309	4,309	4,309	4,309	4,309	4,309	4,309	4,309	4,309	4,309	4,309
Cash on Hand	6	6	6	6	6	6	6	6	6	6	6	6
Special Deposits	759	759	759	759	759	759	759	759	759	759	759	759
Foreign Exchange	15	15	15	15	15	15	15	15	15	15	15	15
Temporary Cash Investments	71	71	71	71	71	71	71	71	71	71	71	71
Notes Receivable	33	33	33	33	33	33	33	33	33	33	33	33
Customers Accounts Receivable	3,830	3,830	3,830	3,830	3,830	3,830	3,830	3,830	3,830	3,830	3,830	3,830
Other Accounts Receivable	252	252	252	252	252	252	252	252	252	252	252	252
Provision for Uncollectable Accounts - Credit	△ 15	△ 44	△ 44	△ 44	△ 44	△ 44	△ 44	△ 44	△ 44	△ 44	△ 44	△ 44
Materials & Supplies	7,707	5,958	6,258	5,588	6,951	7,350	7,760	8,271	8,801	9,384	10,025	10,730
Store Cost Unallocated	298	298	298	298	298	298	298	298	298	298	298	298
Prepayments	102	102	102	102	102	102	102	102	102	102	102	102
Advances in Purchase Contracts	2,456	2,456	2,456	2,456	2,456	2,456	2,456	2,456	2,456	2,456	2,456	2,456
Other Current & Accrued Assets	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600	2,600
4. Miscellaneous Debits	2,086	2,086	2,086	2,086	2,086	2,086	2,086	2,086	2,086	2,086	2,086	2,086
Construction Cost - N.O.B. Contracts	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Investment in North Korea Property	1	1	1	1	1	1	1	1	1	1	1	1
Contingent Assets Contractors Guarantees	85	85	85	85	85	85	85	85	85	85	85	85
5. Deferred Debits	16,248	16,320	16,400	16,482	16,585	16,692	16,810	16,940	17,083	17,240	17,413	17,601
Preliminary Surveys & Investigation	263	335	415	502	600	707	825	955	1,098	1,255	1,428	1,611
Miscellaneous Deferred Debits	15,985	15,985	15,985	15,985	15,985	15,985	15,985	15,985	15,985	15,985	15,985	15,985
Total Assets & Other Debits	250,079	259,781	266,049	270,278	271,738	283,017	291,708	308,600	322,724	333,697	343,132	353,211

Proforma Balance Sheet (3)

Liabilities & Other Credits

Unit: 10<sup>6</sup> Won

Account	Year	70	71	72	73	74	75	76	77	78	79	80	81
6. Proprietary Capital		87,317	93,944	104,264	113,023	120,253	131,271	147,871	170,725	196,398	226,701	262,836	304,949
① Common Capital Stock		63,668	63,668	63,668	63,668	63,668	63,668	63,668	63,668	63,668	63,668	63,668	63,668
② Dividends Due Government of Korea		3,661	12,403	15,602	18,796	21,990	25,184	28,378	31,572	34,766	37,960	41,154	44,348
③ Capital Surplus		23	23	23	23	23	23	23	23	23	23	23	23
④ Earned Surplus		15,465	17,845	20,971	30,566	34,572	42,594	53,202	75,462	97,941	125,030	157,991	196,910
Earned Surplus Appropriated		4,945	7,424	10,164	17,464	22,970	25,964	33,321	543	61,923	82,715	109,125	139,745
Legal Reserve		7,545	3,040	3,501	4,501	4,957	5,562	6,384	7,508	8,904	10,705	12,822	15,266
Income Tax		269	-	-	-	-	-	-	-	-	-	-	-
Reserve for Equalization of Dividend		180	-	-	-	-	-	-	-	-	-	-	-
Reserve for Retirement of Officers		28	41	41	41	41	41	41	41	41	41	41	41
Special Reserve		1,964	4,343	5,562	13,132	17,572	20,361	26,894	39,994	52,978	71,969	96,262	124,438
Earned Surplus Unappropriated		10,520	10,421	14,807	13,122	12,102	16,632	22,481	27,919	36,018	42,335	48,868	56,265
Surplus from Previous Period		423	0	0	0	0	0	0	0	0	0	0	0
Not Income Current Year		2,892	10,421	14,807	13,122	12,102	16,632	22,481	27,919	36,018	42,335	48,868	56,265
7. Long Term Debts	(131,945)	113,722	156,095	177,320	208,436	247,017	274,357	288,488	296,095	307,632	322,706	309,579	292,462
Long Term Loan	(128,291)	113,722	152,349	175,132	205,503	244,346	271,261	286,378	294,267	306,131	321,523	308,739	293,169
Other Long Term Debts	3,654	3,401	3,188	2,935	2,671	2,696	2,110	1,812	1,828	1,501	1,177	840	690
8. Current & Accrued Liabilities	(15,684)	20,907	22,599	24,773	26,242	26,792	29,063	32,160	34,132	36,224	36,520	37,266	39,027
Notes Payable		1,402	1,402	1,402	1,402	1,402	1,402	1,402	1,402	1,402	1,402	1,402	1,402
Accounts Payable - Purchase		77	77	77	77	77	77	77	77	77	77	77	77
Accounts Payable - Others		628	628	628	628	628	628	628	628	628	628	628	628
Customers Deposits		16	16	16	16	16	16	16	16	16	16	16	16
Taxes Accrued		85	85	85	85	85	85	85	85	85	85	85	85
Interest Accrued		1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428

Performance Balance Sheet (4)

Liabilities & Other Credits

Unit: 10<sup>6</sup> Won

Account	Year	70	71	72	73	74	75	76	77	78	79	80	81
Dividend Declared		68	68	68	68	68	68	68	68	68	68	68	68
Tax Collection Payable		867	867	867	867	867	867	867	867	867	867	867	867
Contractors Guaranty Deposits		325	325	325	325	325	325	325	325	325	325	325	325
Long Term Loans-Maturing Current Year		27,037	15,639	17,923	19,412	19,942	22,213	25,310	27,312	29,374	29,670	30,416	32,177
Other Current & Accrued Liabilities		1,954	1,954	1,954	1,954	1,954	1,954	1,954	1,954	1,954	1,954	1,954	1,954
9. Miscellaneous Credits		2,086	2,086	2,086	2,086	2,086	2,086	2,086	2,086	2,086	2,086	2,086	2,086
Advances from N.C.S. - Contracts		2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Liabilities to North Korea		1	1	1	1	1	1	1	1	1	1	1	1
Contra Liabilities - Long-term Guaranties		85	85	85	85	85	85	85	85	85	85	85	85
10. Deferred Credits		7,788	7,788	8,000	8,126	8,266	8,421	8,592	8,780	8,984	9,203	9,431	9,665
Customers Advances for Construction		1,901	1,901	2,013	2,139	2,279	2,434	2,603	2,793	2,997	3,216	3,444	3,678
Other Deferred Credits		5,987	5,987	5,987	5,987	5,987	5,987	5,987	5,987	5,987	5,987	5,987	5,987
11. Operating Reserve		12,410	12,925	13,063	13,500	13,980	14,498	15,039	15,607	16,187	16,771	17,369	17,981
Property Insurance Reserve		242	335	435	542	662	793	933	1,080	1,241	1,408	1,589	1,787
Employee Retirement Reserve		7,366	7,366	7,366	7,366	7,366	7,366	7,366	7,366	7,366	7,366	7,366	7,366
Special Maintenance Reserve		-	-	-	-	-	-	-	-	-	-	-	-
Injury & Death Reserve		2	2	2	2	2	2	2	2	2	2	2	2
12. Contributions in Aid of Construction		2,749	2,749	2,749	2,749	2,749	2,749	2,749	2,749	2,749	2,749	2,749	2,749
Contributions in Aid of Construction		2,749	2,749	2,749	2,749	2,749	2,749	2,749	2,749	2,749	2,749	2,749	2,749
Total Liabilities & Other Credits		250,677	269,781	278,049	286,278	294,738	303,417	312,359	321,580	331,184	341,187	351,512	362,171

B. Operating Cost (Actual) - (1)

( 1966 - 1970 )

(In Million Won)

Function	66	67	68	69	70
1. Production					
Fuel	3,570	6,139	8,894	9,908	11,791
Payroll	414	526	778	1,031	1,481
Repair & Maintenance	426	550	747	1,120	1,028
Others	133	201	438	684	1,117
Sub-Total	4,543	7,416	10,857	12,743	15,417
2. Purchased Power	-	9	109	-	-
3. Transmission					
Payroll	217	266	401	539	776
Repair & Maintenance	85	130	162	182	257
Others	38	60	121	244	439
Sub-Total	340	456	684	965	1,472
4. Distribution					
Payroll	765	945	1,181	1,417	1,751
Repair & Maintenance	393	422	767	729	815
Others	190	274	373	656	816
Sub-Total	1,348	1,641	2,321	2,802	3,382
5. Customer's Accounts					
Payroll		479	591	719	871
Payment Fee		268	368	478	616
Others		277	511	309	272
Sub-Total		1,024	1,470	1,506	1,759

B. Operating Cost (Actual) - (2)

(1966 - 1970)

(In Million Won)

Function	66	67	68	69	70
6. Sales					
Payroll	424	50	92	120	167
Customer's Accounts	51	76	74	96	115
Others	324	4	4	11	24
Sub-Total	799	130	170	227	306
7. Administrative & General					
Payroll	300	396	494	629	888
Retiring Allowance	535	984	938	1,630	2,141
Repairs & Maintenance	22	33	35	32	42
Others	265	325	426	668	799
Sub-Total	1,122	1,738	1,893	2,959	3,870
Total					
Fuel	3,570	6,139	8,894	9,908	11,791
Payroll	2,120	2,662	3,537	4,455	5,934
Retiring Allowance	535	984	938	1,630	2,141
Purchased Power	-	9	109	-	-
Repairs & Maintenance	926	1,135	1,711	2,063	2,142
Payment Fee	-	268	368	478	616
Customer's Accounts	51	76	74	96	115
Others	950	1,141	1,873	2,572	3,467
Grand Total	8,152	12,414	17,504	21,202	26,206

B. Operating Cost (Forecast) (1)  
(1971-1981)

(In Million won)

Function	71	72	73	74	75	76	77	78	79	80	81
1. Production											
Fuel	12,873	14,444	14,944	15,524	18,389	21,778	25,670	29,351	34,852	39,916	44,331
Payroll	2,075	2,695	3,149	3,621	4,047	4,701	5,274	5,893	6,714	7,615	8,507
Repair & Maintenance	1,385	1,501	1,800	2,276	2,732	3,058	3,392	3,871	4,634	5,061	5,537
Others	1,216	1,358	1,411	1,438	1,533	1,802	2,007	2,115	2,282	2,467	2,625
Sub-Total	17,549	19,998	21,304	22,859	26,756	31,339	36,343	42,250	48,482	55,059	61,000
2. Purchased Power	4,732	12,375	19,279	27,642	29,944	30,439	29,117	30,040	29,533	28,986	28,422
3. Transmission											
Payroll	1,099	1,301	1,556	1,862	2,109	2,390	2,708	3,033	3,409	3,786	4,206
Repair & Maintenance	411	444	532	673	800	904	1,003	1,114	1,370	1,496	1,637
Others	609	666	799	852	901	951	999	1,044	1,093	1,131	1,166
Sub-Total	2,119	2,411	2,887	3,387	3,810	4,245	4,710	5,221	5,872	6,413	7,009
4. Distribution											
Payroll	2,149	2,766	3,356	4,053	4,681	5,380	6,184	7,075	8,093	9,169	10,389
Repair & Maintenance	1,156	1,256	1,503	1,900	2,281	2,553	2,832	3,231	3,868	4,225	4,622
Others	917	1,003	1,092	1,184	1,200	1,376	1,474	1,570	1,666	1,738	1,806
Sub-Total	4,222	5,022	5,951	7,137	8,242	9,309	10,490	11,876	13,627	15,132	16,817
5. Customer's Account											
Payroll	923	1,156	1,415	1,725	2,001	2,312	2,657	3,039	3,443	3,883	4,359
Payment Fee	735	863	1,000	1,147	1,305	1,470	1,643	1,817	1,990	2,129	2,250
Others	358	402	447	493	540	588	636	682	725	760	790
Sub-Total	2,016	2,421	2,862	3,365	3,846	4,370	4,936	5,533	6,158	6,772	7,397
6. Sales											
Payroll	175	202	246	299	345	400	461	530	609	697	797
Customer's Account	67	79	92	106	121	136	152	168	184	197	208
Others	24	27	31	35	39	43	47	51	55	59	63
Sub-Total	266	308	369	440	506	579	660	749	848	953	1,068

B. Operating Cost (Forecast) (2)

( 1971 - 1981 )

(In Million won)

Function	71	72	73	74	75	76	77	78	79	80	81
7. Administrative & General											
Payroll	1,177	1,193	1,400	1,634	1,825	2,037	2,264	2,516	2,796	3,090	3,416
Retiring Allowance	1,885	2,983	3,569	4,234	4,815	5,525	6,272	7,088	3,041	9,060	10,161
Repair & Maintenance	60	66	79	99	119	133	147	169	202	220	240
Others	948	1,064	1,181	1,297	1,414	1,531	1,644	1,757	1,868	1,969	2,060
Sub-total	4,070	6,311	6,229	7,264	8,173	9,226	10,327	11,530	12,907	14,339	15,877
Total											
Fuel	12,873	14,444	14,944	15,524	18,389	21,778	25,670	29,351	34,852	39,916	44,331
Payroll	7,598	9,313	11,122	13,194	15,009	17,220	19,548	22,091	25,064	28,240	31,672
Retiring Allowance	1,885	2,988	3,569	4,234	4,815	5,525	6,272	7,083	8,041	9,060	10,161
Purchased Power	4,732	12,375	19,279	27,642	29,944	30,439	29,117	20,040	29,533	28,986	28,422
Payment Fee	735	863	1,000	1,147	1,304	1,470	1,643	1,817	1,990	2,129	2,250
Customer's Accounts	67	79	92	106	121	136	152	163	184	197	208
Others	4,072	4,520	4,961	5,299	5,762	6,291	6,807	7,219	7,689	8,124	8,510
Repair & Maintenance	3,012	3,264	3,914	4,948	5,940	6,648	7,374	8,415	10,074	11,002	12,036
Grand Total	34,974	47,846	58,881	72,094	81,284	89,507	96,583	106,189	117,427	127,654	137,590



**KOREA ELECTRIC COMPANY**

